ON SOME NUDIBRANCHS FROM THE PACIFIC, INCLUDING A NEW GENUS, *CHROMODORIDELLA*.

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The Nudibranchs described in this paper have been derived from various sources, and consist of (1) *Dictyodoris tessellata* from Madagascar, (2) *Rizzolia modesta* and *Chromodoris petechialis* from Japan, (3) Abraham's *Doris Wellingtonensis* from New Zealand, which has been referred to *Doridopsis*, but is here shown to be an *Archidoris* or *Anisodoris*, (4) a small collection sent by Mr. Burnup from Scotsburg, Natal, about 30° S., consisting of *Chromodoris runcinata, lineata*, and *annulata*, *Chromodoridella mirabilis*, gen. et sp. nov., and *Hexabranchus* (?) *Adamsii*. Considering the latitude of the locality, this last-named collection is remarkably equatorial in character. Of the other species, *Dictyodoris tessellata* has hitherto been recorded from the Palm Islands and *Ch. petechialis* from Hawaii, so that, as usual, the forms appear to be widely distributed over the Indo-African-Pacific area.

Dictyodoris tessellata, Bergh.

Dictyodoris tessellata, Bergh: Semper's Reisen Archipel. Philippin., Theil iv, Heft 1, pp. 75–78, pl. C, figs. 11–12; pl. F, figs. 22–23.

Two specimens from Madagascar were kindly given me by Professor Völtzkow. The label bears the inscription "Bai v. Tulear, S.W. Madagask. Riff am Steinen." They are clearly of the same species, but one is nearly twice as large as the other. The measurements of the larger are: length 22·5 mm., breadth 18, height 9. The mantle-edge is ample, being 7 mm. wide at the sides and 5 over the head and tail.

The texture is like a hard clear jelly. On the back is an elaborate reticulate or stellate pattern, which is much more developed in the larger than in the smaller specimen. Its genesis seems to be that there are three dorsal ridges bearing three or four tubercles each. These tubercles are then connected by secondary ridges. Tertiary ridges extend towards the middle of the figures thus formed, and towards the mantle-edge, but are little developed in the smaller specimen. The ridges are white in the smaller, pale purple in the larger specimen. In both the colour between the ridges is brownish purple, with numerous round white dots. Round the mantle runs a purplish-white border. The foot is bluish white. There are purple spots on the under side of the mantle, and a purple band at the junction of the foot and body. The foot shows no sign of an anterior groove or notch, but is much contracted.

The rhinophore openings are closed, as is also the branchial pocket in the larger specimen. In the smaller it is open and roundish, without teeth or lobes. The branchiæ are four, two on each side, the rhachis thick, the branches few and bipinnate, white, but deep red at the tips.

The formula of the radula is at its maximum about 54 × 40 : 0 : 40. The teeth are simply hamate, crowded, and smaller in the middle. The four or five outermost are somewhat degraded in shape, with fine hair-like denticles on the apex. A trace of the hook sometimes remains in a larger denticle.

The coloration, dorsal pattern, radula, and branchiæ leave no doubt that this is *D. tessellata*, but I think the genus should be united with *Halgerda*, Bergh, which appears to have priority as a name, though it is difficult to be sure, as both genera were created in 1880. I cannot find any material difference in his description of the two genera. If they are united the list of species will be as follows:—

1. *H. formosa*, Bergh: Verhandl. zool.-botan. Gesell. Wien., vol. xxx, pp. 190–195, pl. iv, figs. 15–20; pl. v, figs. 10–12 (1880).
2. *H. tessellata* (Bergh): Semper's Reisen, Suppl., Heft i, p. 75, pl. C, figs. 11–12; pl. F, figs. 22–23.
3. *H. maculata*, Eliot: Gardiner's Fauna and Geog. Maldive and Laccadive Archipel., p. 556: small, and perhaps an immature specimen of *H. Wasinensis*.
4. *H. Willeyi*, Eliot: Proc. Zool. Soc., 1904, vol. ii, p. 372.
5. *H. Wasinensis*, Eliot: l.c., p. 373.

Rizzolia modesta (?), Bergh.

Rizzolia modesta, Bergh: Verh. z.-b. Wien., vol. xxx, pp. 156–160, pl. i, figs. 1–11 (1880).

One specimen from the Inland Sea, Japan, dredged by Mr. Gordon Smith in 85 fathoms. As preserved, it is of a uniform yellow and stoutly built, being 32 mm. long, 9 mm. broad across the pericardium, and 11 mm. high to the top of the pericardium, which is large and prominent. The left side of the head has apparently been bitten off, and only the right oral tentacle remains. It is large and stout, 9 mm. long. The rhinophores are much smaller, being 5·5 mm. long, stout, and set close together, slightly wrinkled, but not perfoliate.

The cerata are set in eight groups on each side, but the last three or four groups are close together, so that superficially the number seems less. Each group consists of two rows of papillæ arranged in a horse-shoe (v. Bergh's figures, l.c., pl. i, fig. 1). The first two groups are set on very distinctly projecting prominences; the remainder are only slightly raised above the level of the back. The first group contains about 14 cerata, none of which are very long. The number of cerata in the living animal is rather greater than is given here, for though they are not very caducous, a good many have fallen off. There is a considerable interval between this group and the second, which contains 19 cerata, in the midst of which is the anal papilla. The third and fourth groups contain respectively 16 and 14 moderately

long cerata; the fifth and sixth also 14, but rather shorter; the seventh and eighth 10 each, shorter still.

The cerata are longer towards the middle, and shorter towards the ends of the horse-shoe. The largest are in the second group, and measure 11 mm. They are all cylindrical, rather thin, and contain yellow liver-branches, which nearly fill the small ones, though they form only a comparatively narrow centre in the larger. These branches are not ramified, but are constricted here and there, and have an irregular lumpy surface. The cnido-sacs at the tip of the cerata are paler than the rest of these organs. The genital papilla is between the first and second groups of cerata.

The foot is broad, with expanded lateral margins; the anterior margin is produced into moderately long tentacular expansions, grooved and bilobed in the upper lip. The mouth is a large, round opening. The jaws are large, yellow, with a single row of short, blunt denticles. The radula consists of a single row of 28 yellow teeth, of horse-shoe shape, with a strong central cusp, and five rather long and slightly curved lateral denticles, as in Bergh's plates (l.c., pl. i, figs. 7–8). A few teeth have only four denticles, but I did not see any which had more than five.

This is perhaps a large specimen of *R. modesta*, recorded from Eno-sima, Japan. But it is proportionately stouter, and with longer tentacles; also the colour in life was possibly different. On the other hand, the arrangement of cerata seems the same, and the teeth agree with Bergh's plates, though none have more than five denticles. Perhaps a description of the colour and appearance of the living animal would enable one to formulate characters justifying specific rank.

It may be doubted whether the genus *Rizzolia* is really distinct from *Hervia*. The characters, as formulated by Bergh, are almost identical. If the two genera are to be regarded as separate, it would appear that the chief peculiarity of *Rizzolia* is that the groups of cerata are set on low but still quite distinct projections of the body.

Chromodoris petechialis (Gould).

Doris petechialis, Gould: United States Exploring Expedition, 1838–42, vol. xii, p. 296, Atlas, figs. 391, 391*a* (1852).

One specimen obtained by Mr. Gordon Smith in the Inland Sea, Japan.

The animal, as preserved, is soft in texture, almost gelatinous; thick and stout; length 30 mm., breadth 21·5, height 15. The ground-colour is a semitransparent white, showing the viscera. The mantle completely covers the head and foot, and is bordered with orange, as is also the foot, but less distinctly. On the inside the mantle-border looks as if the colouring-matter had dissolved and slightly tinged the adjacent parts. On the back are scattered purplish spots, not at all raised, and about $2 \times 1{\cdot}5$ mm. in size. They are thickest behind the branchiæ. Similar spots are found at the sides of the foot.

The pockets of the rhinophores and branchiæ are not raised. The

rhinophores are large and bright orange. The branchiæ are white below and orange above. They are 18 in number. The three at each side are larger than the rest; the anterior plumes are very small, and the hindermost turn inwards in a spiral.

The foot is broad, grooved, but not notched in front. The mouth-parts are everted. On each side is a thick, strong tentacle.

The labial armature consists of two yellowish plates, composed of thick-set, bifid rods. The colourless radula has a formula of about 91 × 85 : 0 : 85 at its greatest width. The teeth are as usual in the genus, the innermost denticulate on both sides, the laterals on the outer side only, and the two or three outermost on the top. The laterals are tall, erect, hamate, but not much bent until quite the top, and bearing 7–10 minute denticles below the main hook.

I think this animal may be identified with Gould's *Doris petechialis*, described as follows:—"Animal rounded, oval, depressed, pale, a little slate-coloured each side, and with a marginal orange-coloured line and a submarginal lemon-coloured shading; over the whole surface are small, regularly disposed, rose-red blotches, like petechiæ. Cervical tentacles tapering, vermilion-coloured, with only a minute portion laminated. Branchial star of six narrow, tapering, pinnate plumules. Head very small; lateral tentacles short, conical; foot narrow, shorter than the body; beneath colourless, the mantle and foot bordered with pale orange." Length 2½ inches, breadth 1¼. Habitat, Honolulu.

The above description corresponds almost exactly with the external characters of the present specimen, the only important point of difference being that the branchiæ are given as 6, not 18. But of the 18 branchiæ 6 are larger than the others, and no doubt in life they project conspicuously from the pocket, whereas the smaller plumes remain hidden.

Collingwood's *Ch. tumulifera* (Trans. Linn. Soc., Zool., vol. ii, 1881, p. 130) is probably identical with *D. petechialis*, but is smaller and has raised tuberculate spots which possibly disappear with age. *Ch. pallescens*, Bergh, and *Ch. inornata*, Pease, are closely allied forms, but present slight differences, particularly in the shape of the teeth, which render identification with the present specimen difficult, though they may assume its characters with further growth, as they are small and perhaps young forms.

The name *petechialis* has undoubted priority, and must be borne by any species which can be identified with Gould's animal.

Ch. picta (Pease), (Proc. Zool. Soc., 1860, p. 29), is not improbably a colour variety of the same species.

Chromodoris runcinata, Bergh.

Chromodoris runcinata, Bergh: Semper's Reisen, Heft xi, pp. 479–481, pl. li, figs. 32–33; pl. liii, figs. 5–12 (1877); Eliot, Proc. Zool. Soc., 1904, vol. i, pp. 393–4.

Two specimens, both about 25 mm. long and 7 broad. They are bluish white, with markings of orange and dark blue, both of which colours form a sort of reticulate mottling as well as isolated dots. Branchiæ in one specimen 12, and grey; in the other, 13, and red.

One specimen has 10 very small conical protuberances under the posterior edge of the mantle; the other only 5, but much larger. Neither has any protuberances on the anterior mantle-edge. Their absence appears characteristic of the African specimens.

Chromodoris (?) lineata (Souleyet).

Chromodoris (?) *lineata* (Souleyet): Eliot, Proc. Zool. Soc., 1904, vol. i, pp. 396–7, pl. xxiv, fig. 7.

One specimen 20 mm. long, 5 broad, and 5 high; bluish white, with 5 raised lines down the centre of the back. Rhinophores large; branchiæ 11. Both organs show traces of having been red. The labial armature and radula, as described. The teeth are bifid, with 4–5 smaller denticles.

It does not appear to be recorded that the stripes of *Ch. lineata* are raised, but otherwise the present specimen corresponds fairly well with the forms described under that name, and it seems hazardous to create a new species.

Chromodoris annulata, Eliot.

Chromodoris annulata, Eliot: Proc. Zool. Soc., 1904, vol. i, pp. 389–390.

One specimen, 24 mm. long and 10 broad.

The texture is flabby, and the mantle ample. The general colour is dirty grey, with white spots, but a large purple blotch occupies nearly the whole region of the back, behind the rhinophores. The branchiæ are 16, arranged in a spiral, and have a dark stripe down the inner and outer edge. The labial armature consists of minute hooked rods. The radula is as described; the teeth bear about 10 denticles.

Ch. annulata has the perplexing peculiarity of losing, when preserved, the pattern which is characteristic of it in life. The present specimen appears to coincide in structure with those which I found at Zanzibar and to have lost its colour in much the same way.

Chromodoridella mirabilis, gen. et sp. nov.

This remarkable animal may be succinctly described as a *Chromodoris* with the branchial pocket situated, not on the dorsal surface, but on the under side of the body, and pointing downwards. I confess to considerable doubt as to whether it is a normal form or a monstrosity, but Mr. E. A. Smith and Mr. F. Jeffrey Bell, who have examined it, agree with me in thinking that it shows no signs of distortion or irregularity. The proportions are symmetrical, and both the external and internal characters appear perfectly natural. It must therefore, I think, be accepted as a valid generic type, unless reason can be shown for treating it as a *lusus naturæ*.

The chief reason for suspecting that it is not a normal form is that, although the position of the branchiæ is so unusual, it is otherwise not only a typical *Chromodoris* but closely allied to, if not identifiable with, *Ch. Semperi*. The shape, the colour, the radula, and the labial armature all recall those of this species (see Bergh, Semper's Reisen, Heft xi, p. 482), though there are differences of detail.

It may be observed that the alteration in the position of the branchial pocket, though striking, is not morphologically of much importance, and does not imply any considerable modification of the organism. In a flat Dorid the branchiæ could hardly be placed under the mantle-edge without undergoing some alteration of structure, but, in a form like the present, where there is space to allow of their being freely suspended, a very slight change in the direction of the intestine and the vascular system is sufficient to account for the difference.

In any case the present specimen appears to be a special modification of *Chromodoris*, and not to represent an order parallel to the Cryptobranchiata, as *Corambe* may be supposed to do. The branchiæ, though abnormal in position, have otherwise the characters of the genus *Chromodoris*, whereas *Corambe* has merely a few lamellæ at the posterior end of the body under the mantle-margin.

It is also probable that this specimen is not referable to the genus *Hypobranchiæa*, A. Adams, and it certainly is not his *H. fusca* (Gen. Rec. Moll., vol. ii, p. 46, and Proc. Zool. Soc., 1847, pp. 23–4), which is a flat brownish animal six inches long. It is very inadequately described by Adams, but as he places it under the Phyllidiidæ, this position, taken in conjunction with his description of the family characters, ought to mean that it has no jaws or radula. He does not, however, say that he examined the buccal parts. In Proc. Zool. Soc. (loc. cit.) he says that *Hypobranchiæa* "differs from all the other genera of the Doridida in having the vent, and the gills which are extruded from it, situated beneath the edge of the mantle." This language is probably not accurate, but it sounds like an incorrect description of a branchial pocket with pendent extruded plumes like that of *Chromodoridella mirabilis*.

The single specimen is superficially not unlike those of *Chromodoris runcinata* which were sent with it, but is somewhat slenderer and higher, and resembles *Ceratosoma* in shape, as the body slopes upwards from the head, and the end of the back is continued above the tail for some distance. The total length from the head to the tip of the tail is 21 mm., from the head to the end of the dorsal surface 16 mm., of the tail 9 mm., of the dorsal process 7 mm. The height at the head is 4·5 mm., at the middle of the back 6 mm., at the end of the back 6·5 mm. The breadth is 6·5 mm. at the head, and 4·5 mm. across the dorsal process. The mantle-edge measures 1 mm. at the sides, and 2 mm. over the head. The texture is soft and flabby. The ground-colour is dirty white, with numerous deep yellow spots and fewer scattered greenish-blue spots. Both kinds are arranged quite irregularly, but they are most numerous on the back, and fewer at the sides. The sole of the foot is colourless. The foot is long and expanded in front, both laterally and anteriorly, so that it projects a considerable distance before the mouth. The anterior margin is thickened, but not grooved. The mantle-margin is thin, quite distinct, and expanded into a small veil over the head. The rhinophores are yellow, stout, and mace-like, with about 15 perfoliations. They are retractile into pockets with hardly raised edges.

On the under side of the dorsal process, about 1 mm. from its end and 4 mm. from the body, is the branchial pocket, from which project 12 simply pinnate branchiæ, surrounding a large anal papilla. They are all united at the base, and completely extruded in a bunch from the pocket, which has a simple round rim, not at all raised. It is not clear that the branchiæ could be entirely retracted into it.

The mouth, on each side of which is a distinct conical tentacle, opens into a wide, much puckered, and laminated cavity. The labial armature consists of two yellowish plates. Under the microscope they have the appearance of a tessellated pavement, and are seen to be composed of small rods with thick bent heads, as in Bergh's plates of *Ch. Semperi* (Semper's Reisen, Heft x, pl. li, fig. 34). The radula also resembles that of *Ch. Semperi*. The teeth are bifid, but the two prongs are rather longer and more curved. The innermost teeth have an accessory denticle, and the outermost, which are fairly tall and straight, have two or three. There are 58 rows, and the maximum number of teeth on each side is about 80. There is no stomach outside the liver, which is purplish, and rounded before and behind. On issuing from the liver the intestine runs along the top of it on the right-hand side, and then turns downwards.

No armature was found in the reproductive organs. The central nervous system is as usual; the eyes large and black. A small flocculent mass above it is probably the blood-gland.

Hexabranchus (?) Adamsii, Gray.

Hexabranchus Adamsii, Gray: H. & A. Adams, Gen. Rec. Moll., vol. ii, p. 59, pl. lxiii, fig. 9; Gray, Guide Syst. Dist. Moll. Brit. Mus., p. 210; M. E. Gray, Figures of Molluscous Animals, pl. ccxix, fig. 1.

One specimen, with a length of 21 mm. and a breadth of 5 mm., and therefore unusually long and narrow. The colour is whitish, with a narrow, bright light-red border, inside which, but hardly connected with it, are a row of similarly coloured blotches, each having, in the centre, a deep bright-red dot. Then follows a clear white zone; then, down the centre of the back, two rows of similar blotches, with dots, growing larger towards the branchiæ. There are two rows of bright-red dots, without blotches, on the under side, one at the junction of the mantle and the foot, the other lower. The sole is colourless, and allows the intestines to be seen through it. The mantle-edge is folded against the sides of the body, but, when stretched out, measures 3 mm. at most. The rhinophores are large and straight, with tall stalks. The laminated part is bright red. The margins of the pockets are not raised. The branchiæ are as usual in the genus, eight in number, whitish, with remains of bright-red lines.

The tentacles are large, flat, folded in two, the edges indented, but not very deeply. The labial armature consists of two greyish plates composed of minute rods, somewhat bent, and of rather varying shape. The radula consists of 30 rows, containing 35 or 40 large hamate teeth on each side of the bare rhachis. They are yellowish,

with strongly built bases. The innermost and two or three outermost are smaller, but not denticulate or degraded. The other internal organs appear to be as usual in the genus. The verge is long (11 mm.) and greenish.

The references given above contain practically no information about *H. Adamsii*, except that afforded by the figures, which represent a rather elongated animal having blotches and dots on the back, and dots round the foot, much as described above. The original was probably a specimen resembling the present one.

The so-called species of *Hexabranchus* are of very doubtful validity, and are perhaps merely colour varieties. The present specimen shows no variation in structure from the ordinary type, but the pattern of blotches with central dots is distinct and remarkable, as is also the extreme narrowness compared to the length. These two characters, if found in other individuals, constitute a better species than most of those described.

Archidoris Wellingtonensis (Abraham).

Doris Wellingtonensis, Abraham: Proc. Zool. Soc., 1877, pp. 211, 259, pl. xxix, figs. 27–28.

On p. 1121 of his "System der Nudibranchiaten Gasteropoden" (Semper's Reisen, Heft xviii, 1892) Bergh gives, in his list of the species of *Doridopsis*, "40. *D. lacera* (Cuv.), *Doris wellingtonensis*, Abraham. M. Pacific (Nov. Zel.)." I have not found any explanation of this entry, but an examination of the type-specimen in the British Museum leaves no doubt that Abraham's *D. Wellingtonensis* is not a *Doridopsis*, but belongs to the Archidorididæ. I think also that Cuvier's *Doris lacera* is not a *Doridopsis*, but a *Hexabranchus*.

This latter view seemed to be adopted by Professor Bergh in treating of *Doridopsis* in Journ. Mus. Godefroy, Heft viii (1875), p. 85, where he says, "Wenn die Darstellung der Tentakel bei Cuvier richtig ist, gehört diese Form absolut nicht den Doriopsen an." Even in his Syst. Nud. Gast., p. 1091, under *Hexabranchus*, we find *D. lacera*, Cuvier, as a synonym of *H. flammulatus*, and in his account of the Opisthobranchiata collected by Schauinsland (p. 225) he adheres to this opinion. Cuvier's *Doris lacera* (Ann. Mus. Hist. nat., 1804, p. 452, etc.) was brought by M. Péron from La mer des Indes. It would seem to be undoubtedly a *Hexabranchus*, and not a *Doridopsis*, on account of the characters presented by the tentacles, the branchiæ, and the radula. It is true that Cuvier says on p. 459, "Les Doris diffèrent éminemment des Tritonies par la bouche en trompe et sans dents dans les premières, courte et armée de mâchoires tranchantes dans les secondes." But he says later (p. 460), "Au fond de la trompe est une fente verticale . . . . derrière est la langue qui ressemble à celle de la Tritonie et de l'Aplysie." We have become familiar with the idea that the radula is a set of teeth, but Cuvier evidently thought of it as a tongue, which is equally natural, and when he said that his *Doris* had no teeth he did not mean that it had no radula.

Through the kindness of Mr. E. A. Smith I have been allowed to examine both the type-specimen of Abraham's *Doris Wellingtonensis* in the British Museum, and also a very fine specimen from Otago.

The type-specimen is not well preserved, but agrees with Abraham's description of its external characters. There are whitish tubercular spots between the large flat pustules, and the oral tentacles have a distinct pit at the apex. It would appear, however, from a comparison with the other specimen, that this curious feature is due to distortion by the preserving fluid. Abraham says there is no groove on the anterior margin of the foot. I think there is one, but there are so many lines and wrinkles in this part of the animal that it is hard to say which are natural and which are due to distortion. The branchiæ are seven, bushy, tripinnate. It looks as if there were a few separate plumes rising from the floor of the cavity here and there, near their bases. The radula was extracted. It consists of 48 rows with about 50 teeth, at most, on each side of the rhachis, which is broad, without a central tooth, but with several irregular longitudinal folds. The first lateral projects almost at right angles into the rhachis. It has a short, low hook, and a long thick base. The other teeth are hamate, of the same type, but the hook is longer, and the base shorter. The outermost teeth are smaller, but not degraded. There is a very strong labial cuticle, but no labial armature.

The second specimen is a magnificent example of the animal. It is 137 mm. long, 84·5 broad, and 42·5 high. The mantle-margin is about 20 mm. wide and 7 thick. The foot is long and broad (76 mm.), and just covered by the mantle. The colour, above and below, is a uniform orange yellow. The under parts are very soft and flaccid. The anterior margin of the foot is distinctly grooved. There is a rent in the middle, and it is impossible to say whether there was a natural notch or not. The dorsal surface is much harder, with an almost scaly feeling. The back is moderately arched, and covered with large flat warts, of which the biggest are circular and measure about 9 mm. across. They are arranged in five rather irregular rows. Between them are smaller and lower warts. Outside these large warts are others, very numerous, extending right down to the mantle-edge, and decreasing gradually in size outwards. They are softer than the central warts, but higher, and sometimes quite pointed. Possibly the back has been flattened by accidental pressure. The edge of the mantle is undulated. The openings of the rhinophores and branchiæ are only slightly prominent, crenulate, but not tuberculate or stellate.

The branchiæ are seven, tripinnate, and sometimes quadripinnate, not very large, considering the size of the animal, but much ramified. The anal papilla is subcentral.

The internal organs are not very well preserved, and have been severely injured by two glass skewers which have been driven through the animal, apparently to preserve its form.

The blood-gland is large and much branched. In the central nervous system the common commissure is remarkably large and thick, but, considering the size of the animal, the eyes, which are

black, are very small. The ganglia are injured, but appear to be as in *Archidoris*.

There is a very strong labial cuticle covering a hard muscular ring, but not containing any trace of a labial armature. The hinder part of the radula has been injured. The portion remaining is 14·5 mm. long and 15 5 broad. It consists of 44 rows, containing about 75 teeth on either side of the bare rhachis. The front rows are of a dark mahogany colour, those behind somewhat lighter. As in the type-specimen, the rhachis has two or three longitudinal folds, but is proportionally not so wide. The inner and outer teeth of each row are smaller than those in the middle. The innermost tooth of each row projects almost at right angles into the rhachis; it is low, often irregularly shaped, but not denticulate. The teeth are simply hamate; the outermost smaller, but not degraded.

The salivary glands are large, 40 mm. long when stretched out, and 5 mm. wide at the thickest part. They are tapering, simple, and not at all ramified. The liver has a deep cleft in front, in which lies the stomach. It is laminated internally, and full of what appear to be fragments of a grass-like seaweed.

The reproductive organs are very much injured. The verge and vagina appear to be as in *Archidoris*, and not armed. The vas deferens is much convoluted. Lying with the other organs, but detached from them, is a long greyish gland, which may be a prostate. If so, the animal is referable to Bergh's genus *Anisodoris*. I am not, however, myself of opinion that the mere presence or absence of a prostate is sufficient to divide otherwise similar forms into separate genera.